

ECR #: P3

Tracker #: 5

Status: Ratified

Title: Change in Section 3.9.2 for I/O Aperture Area

Release Date: June 2, 1997

Impact: Clarification

Spec Version: NLX 1.2

Summary:

Change Section 3.9.2 to more clearly explain the intent of the contact surface for the I/O aperture. Only the text that is underlined is changed from the 1.2 specification.

Background:

The explanation of the flat surface on the flange needed to be modified to match the drawings in ECRs P1 and P2. More text was added to explain the intent more precisely. More text was added to explain the location of the end surface flange in the I/O aperture.

Change Current Specification As Shown:

Replace section 3.9.2 with the following:

3.9.2 Back Panel I/O Shield Side View

The NLX I/O shield side view is illustrated in Figures 3.18, through 3.20.

The I/O shield is surrounded by a flange used to provide EMI containment. EMI containment is discussed in more detail in the next section. The top of the I/O shield mates with a flat surface provided by the chassis back panel opening. The bottom of the I/O shield mates with the base of the chassis. A flat surface on the chassis is required for all surfaces of the I/O shield. The surface of the chassis flange at the top of the I/O opening must be flat from the inside surface of the chassis to the beginning of the minimum top flange gap area. If it is desired to implement a guide or alignment feature for the I/O shield in this top flange, the chassis designer should ensure that any such feature does not interfere with the I/O shield where it meets the flange. The I/O shield will generally require a flat surface on the flange extending to the outer edge of the motherboard. The areas used for end contact of the I/O shield are specified by surface size only, and the specific location of these contact surfaces is left to the designer. A good design will keep this area at a maximum, and centered in the opening to the extent possible. In order to standardize a shield design, the dimensions flagged with an asterisk must be used. Also required is the minimum motherboard location dimension of 7.62mm[.300 inches]. A standard shield must fit between the back of the chassis and the board mounted connectors at the MINIMUM MOTHERBOARD LOCATION. This will limit the standard SHIELD FLANGE LENGTH to a maximum of 5.84mm[.230 inches] plus tolerance. Any deviation from the above mentioned dimensions may require the use of a chassis specific shield.